

Wireline Telemetry Data Rate Prediction

ABSTRACT

A wireline logging method including estimating a data rate requirement associated with a tool string to be connected to a wireline cable and determining an operating characteristic of a wireline cable at the surface. The operating characteristic is indicative of the wireline cable's data rate capacity. Before inserting the wireline cable into a well bore, a down hole value of the operating characteristic is modeled and a down hole data rate capacity is derived based thereon. Upon determining that the estimated data rate requirement does not match the down hole data rate capacity, the tool string is modified to remove or add tools to the tools string to match the tool strings data rate requirements with the estimated data rate capacity of the tool string and cable.